

Windows®. Life without Walls™.
Fujitsu recommends Windows 7.

DATASHEET

FUJITSU ESPRIMO P7936 E85+ DESKTOP PC

THE EXPANDABLE BUSINESS WORKHORSE

ESPRIMO P7936 E85+

The ESPRIMO P7936 E85+ equipped with state-of-the-art Intel® chip and processor technology is the ideal partner for all your demanding business applications. Produced with specially selected material and equipped with comprehensive powersave options, such as up to 87% efficient power supply and energy-saving management, the ESPRIMO microtower PC today already meets the environment requirements of tomorrow and cuts your energy costs. With extended system management functions, intelligent hardware design, extensive tests and a lifecycle of up to 18 months, the high performance levels of this PC meet every requirement.

MICROTOWER

Maximum performance and optimal extendability

- Top-quality, high-value microtower, 6 drive bays, 4 PCI/PCI express interfaces

ENVIRONMENTALLY COMPATIBLE PRODUCT

Your contribution to environmental protection for the continued existence of our planet

- Halogen-free mainboard, sophisticated product concept for the entire lifecycle

SILENT OPERATION

Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized fan concept

SYSTEM MANAGEMENT

Easy system administration for complex IT infrastructure

- Intel® vPro™ technology

ENERGY SAVING

Low power consumption and low costs, without any loss in performance.

- Low energy-consuming processors, up to 87% efficient power supply and enhanced power management settings



COMPONENTS

PROCESSOR

Intel® Core™2 Quad processor Q9650 (4 Cores / 4 Threads, 3.0 GHz, 12 MB, 1333 MHz)
 Intel® Core™2 Quad processor Q9550 (4 Cores / 4 Threads, 2.83 GHz, 12 MB, 1333 MHz)
 Intel® Core™2 Quad processor Q9505 (4 Cores / 4 Threads, 2.83 GHz, 6 MB, 1333 MHz)
 Intel® Core™2 Quad processor Q9400 (4 Cores / 4 Threads, 2.66 GHz, 6 MB, 1333 MHz)
 Intel® Core™2 Quad processor Q8300 (4 Cores / 4 Threads, 2.5 GHz, 4 MB, 1333 MHz)
 Intel® Core™2 Duo processor E8600 (2 Cores / 2 Threads, 3.33 GHz, 6 MB, 1333 MHz)
 Intel® Core™2 Duo processor E8500 (2 Cores / 2 Threads, 3.16 GHz, 6 MB, 1333 MHz)
 Intel® Core™2 Duo processor E8400 (2 Cores / 2 Threads, 3.0 GHz, 6 MB, 1333 MHz)
 Intel® Core™2 Duo processor E7600 (2 Cores / 2 Threads, 3.06 GHz, 3 MB, 1066 MHz)
 Intel® Core™2 Duo processor E7500 (2 Cores / 2 Threads, 2.93 GHz, 3 MB, 1066 MHz)
 Intel® Pentium® processor E6600 (2 Cores / 2 Threads, 3.06 GHz, 2 MB, 1066 MHz)
 Intel® Pentium® processor E5700 (2 Cores / 2 Threads, 3.0 GHz, 2 MB, 800 MHz)
 Intel® Pentium® processor E5500 (2 Cores / 2 Threads, 2.8 GHz, 2 MB, 800 MHz)
 Intel® Pentium® processor E5400 (2 Cores / 2 Threads, 2.7 GHz, 2 MB, 800 MHz)
 Intel® Celeron® processor E3400 (2C/2T, 2.6 GHz, 1 MB, 800 MHz)
 Intel® Celeron® processor E3200 (2 Cores / 2 Threads, 2.4 GHz, 1 MB, 800 MHz)
 Intel® Celeron® processor 450 (1 Core / 1 Threads, 2.2 GHz, 512 KB, 800 MHz)

OPERATING SYSTEM

Operating system optional preinstalled Genuine Windows® 7 Home Basic (EM) 32-bit
 Genuine Windows® 7 Home Premium
 Genuine Windows® 7 Professional
 TwinLoad Microsoft® Windows® XP Professional (DVD)

Operating system compatible openSUSE Linux
 Genuine Windows Vista®

Operating system notes Dependent on configuration Windows 7® versions are:
 Microsoft Office 2007 ready
 Microsoft Office 2010 preloaded. Purchase a Product Key to activate a full Microsoft Office 2010 suite.
 Limited Windows XP support. Microsoft discontinued Windows XP certification on system level.

MEMORY MODULES

1 GB (1 module(s) 1 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM
 2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM
 4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM

HARD DISK DRIVES (INTERNAL)

SSD SATA, 128 GB, 2.5-inch
 SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.
 SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T. business critical
 SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.
 SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.
 SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.
 SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.

Hard disk notes Supporting NCQ and 3 GBit

GRAPHICS ADD ON CARDS (OPTIONAL)

ATI Radeon® HD 5450, 512 MB
 DP to DVI-D (single link) Adapter Cable
 DVI-D + DisplayPort Extension Adapter
 DVI Extension Adapter
 NVIDIA® GeForce® 9300GE, 512 MB
 NVIDIA® GeForce® 9300GE display port low profile, 512 MB
 NVIDIA® GeForce® 9500GS, 512 MB
 NVIDIA® Quadro® NVS 290, 256 MB

DRIVES (OPTIONAL)	1.44 MB Floppy
	Blu-ray Disc™ Triple Writer
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 20in1, 3.5-Inch
INTERFACE ADD ON CARDS/COMPONENTS (OPTIONAL)	
	WLAN III, 802.11g/Draft-n (Windows only)
	Parallel Interface
	Modem adapter kit (EU)
	Modem 56k incl. RJ11 modem cable
	Gigabit Ethernet PCIe x1
	FireWire PCI-Card IEEE1394
	eSATA Interface
	Dual serial card PCI
Base unit	ESPRIMO P7936 E85+
MAINBOARD	
Mainboard type	D3012
Formfactor	µBTX
Chipset	Intel® Q45
Processor socket	LGA 775
Processor quantity maximum	1
System bus (FSB / HT / QPI)	up to 1333 MHz
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	16 GB
Memory frequency	1066 MHz
Memory notes	Dual channel support. For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules).
LAN	10/100/1000 MBit/s Intel® 82567 LM
BIOS version	Phoenix 6.0
BIOS features	BIOS Flash EPROM update by software Recovery BIOS
Audio codec	Realtek ALC663
Audio features	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound
I/O CONTROLLER ON BOARD	
Serial ATA total	4
thereof eSATA	2 (optional)
Controller functions	Serial ATA II NCQ and 3 GBit AHCI Raid 1/0
INTERFACES	
Audio: line-in	1
Audio: line-in / microphone	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	12
USB front	2
USB rear	6
USB internal	4, thereof 2 optional rear
VGA	1
DisplayPort	1 (optional)

INTERFACES

DVI	1 (optional)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	1 (optional) (25pin with EPP and ECP)
Interface Module notes	Anytime USB charge functionality

INPUT DEVICE / COMPONENTS

	Optical USB tilt wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse

DRIVE BAYS

Drive bays total	6
3.5-inch internal bays	2
3.5-inch external bays	2
5.25-inch external bays	2

SLOTS

PCI-Express 2.0 x16	1 x (230 mm) FlexySlot
PCI-Express x4 (mech. x8)	1 x (230 mm) full height
PCI (32-bit / 33 MHz)	2 x (170 / 315 mm) full height

GRAPHICS ON BOARD

Graphics brand name	Intel® GMA 4500
Shared video memory	up to 1759 MB
Refresh rate 1024 x 768 (recommended / max.)	85 Hz / -
Refresh rate 1280 x 1024 (recommended / max.)	85 Hz / -
Refresh rate 1600 x 1200 (recommended / max.)	85 Hz / -
TFT resolution (VGA)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DisplayPort)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel
Graphics features	DirectX 10 HDCP support OpenGL® 2.0
Graphics notes	Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz

ELECTRICAL VALUES

Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 85% / 87% / 85%
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ELECTRICAL VALUES

	0-Watt mode with hard-off switch
Rated voltage range	100 - 240 V
Rated frequency range	50 - 60 Hz
Operating voltage range	90 - 264 V
Operating line frequency range	47 - 63 Hz
Max. output of single power supply	300 W
Power factor correction/active power	active
Monitor outlet	No

POWER CONSUMPTION

Power consumption note	See white paper Energy Consumption 0-Watt mode with hard-off switch
Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=e3b5f294-967b-40cf-b3cd-b3e12d6c3a03

HEAT DISSIPATION

Heat dissipation notes	See white paper Energy Consumption
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NOISE FOR STANDARD CONFIGURATION (HDD, ODD, FDD)

Noise emission	According to ISO9296
Related Processors for noise	Intel® Core™2 Duo E8600
Noise Operation mode 1: ODD load (Blue angel requirement)	4.3 B / 28 dB(A)
Noise Operation mode 2: HDD load (Blue angel requirement)	3.5 B / 18 dB(A)
Noise Operation mode 3: CPU 90% load (Blue angel requirement)	3.4 B / 17 dB(A)
Noise Operation mode 4: High load	3.5 B / 18 dB(A)
Noise Operation mode 5: Office applications	3.5 B / 18 dB(A)
Idle mode (Blue Angel requirement)	3.4 B / 17 dB(A)
Noise notes / description	A weighted sound power level L _{wad} (in B) / workplace related A-weighted sound pressure level L _{pAm} (in dB(A)), Bystander position

DIMENSIONS / WEIGHT / ENVIRONMENTAL

Dimensions (W x D x H)	203 x 390 x 392 mm
Operating position	Vertical
Weight	approx. 12 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35°C

COMPLIANCE

Product	ESPRIMO P7936
Model	MI3W-D3012
Germany	GS optional
Europe	CE Nordic Swan
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL)
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

ADDITIONAL SOFTWARE

Additional software (preinstalled)	Nero Essentials S (burning software)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 9 Essentials XL

MISCELLANEOUS

Thermal management
Keyboard on (Special Fujitsu keyboard required)
Extended lifetime

COMPATIBILITY (REFERENCES)

DMI 2.0
PC 2001
WMI 1.5
USB 2.0
SMBIOS

MANAGEABILITY**Manageability features**

DeskUpdate Driver management
PXE 2.1 Boot code
Wake up from S5 (off mode)
Intrusion switch (optional)
iAMT 5.0

Manageability type

DeskView 10.x client management including:

DeskView features

On/Offline remote client management
Detailed system inventory management and reports
BIOS Management
Remote power management
System notifications
Advanced alerts (ASF implementation)
Security Remote Control
DeskView Helpdesk Integration
WoL (Wake on LAN)

SECURITY**Physical security**

Kensington Lock support
Eye for padlock
Optional: Integrated cabinet lock

System security

Boot sector virus protection
Write protect option for the Flash EPROM
Embedded security (TPM 1.2)
Control of all USB interfaces
External USB ports can be disabled separately
Boot protection for floppy disk / CD drive and write protection for floppy disk drive
Control of external interfaces

User security

User and supervisor BIOS password
SystemLock 2 BIOS SmartCard Security
Hard disk password
Optional: Access protection via external SmartCard reader
Optional: Access protection via internal SmartCard reader

SERVICEABILITY

FlexySlot
EasyFix
EasyChange for HDD
EasyChange for optical drives

PACKAGING INFORMATION**Packaging dimension**

500x290x540 mm

Max. quantity / pallet

24

Material - Weight (g) Carton

1270 g

Material - Weight (g) EPS / PS

210 g

Material - Weight (g) PE

appr. 60 g

Packaging notes

printed user documentation is bleached in chlorine free process

WARRANTY**Standard Warranty**

3 years

Service level

Bring-In / On-Site Service (depending on country)

MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION

WARRANTY

Recommended Service	5x9, Response Time: Next Business Day
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu ESPRIMO P7936 E85+, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu ESPRIMO P7936 E85+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://ts.fujitsu.com/ESPRIMO>

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>

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